

Date: Sun, 25 Sep 94 04:30:13 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #320
To: Ham-Ant

Ham-Ant Digest Sun, 25 Sep 94 Volume 94 : Issue 320

Today's Topics:

 Antenna noise levels
 cell phone directional antenna?
 How to make hole for mobile antenna? (3 msgs)
 MFJ DUAL BAND MOBILE?
 Mounting Tape for Antennas
 SGC-230 Antenna Tuner- Does it really work? (2 msgs)
 VERTICAL ANTENNA NEEDED
 Yagi Antenna for UHF TV

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sun, 18 Sep 1994 03:16:06 +0000
From: pacbell.com!uop!lll-winken.llnl.gov!overload.lbl.gov!dog.ee.lbl.gov!agate!
howland.reston.ans.net!swrinde!pipex!demon!arkas.demon.co.uk!Michael@ames.arpa
Subject: Antenna noise levels
To: ham-ant@ucsd.edu

Hi all,

I'm designing an HF transceiver, and am interested in obtaining rf noise level
values for the HF frequency range. I've seen figures published for vhf/uhf -
these were classified into rural, urban and industrial categories. However, I
suspect that hf figures would be broken up into tropical, temperate and polar
regions for day and night, sunspot maxima and minima, etc., as well.

Can anyone please point me in the direction of a source for this information?

A 'net source would be great, but written material is ok, too.

Replies can be posted to this newsgroup, or mailed to michael@arkas.demon.co.uk

73 and TIA,

--

Mike Dower

G0VEY

'Quoth the raven, "Never more".' ... Poe

VK2ENG

Date: Wed, 21 Sep 94 21:07:20 EST

From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!

newsxfer.itd.umich.edu!news.cic.net!ddsw1!a2i!mack.rt66.com!abq-ros.com!

hayden@network.ucsd.edu

Subject: cell phone directional antenna?

To: ham-ant@ucsd.edu

IH>avery125@delphi.com meinte am 09.09.94

IH>zum Thema "Re: cell phone directional antenna?":

IH>> >Does anyone have plans for a homebuilt directional cell antenna?

IH>> Perhaps a dumb question. Why not use a land line telephone at home?

IH>I have the problem too. In a week-end home I have no line-phone, only a

IH>very weak GSM-signal.

IH>Holger

IH>--

IH>Holger Schoenen, Dortmund;

IH><pgp 2.6 public key available on request or when mailed with ### in subject>

IH>### CrossPoint v3.02 ###

Try locating a program called Yagimax. It is a Yagi antenna design program. The problem you'll have will be in matching the |Z| of the antenna connector and line loss in you coax. Keep it short (coax) and have fun. 73's DE N5UJJ Jeff

The Albuquerque ROS - (505) 296-3000

Date: 24 Sep 1994 07:17:27 -0700

From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!barrnet.net!nntp.crl.com!crl5.crl.com!

not-for-mail@network.ucsd.edu

Subject: How to make hole for mobile antenna?

To: ham-ant@ucsd.edu

I wish I would have read all these responses before I drilled a hole in the roof of my Mazda 323. I used a regular 3/4" drill bit. Not a good idea... It tends to catch the sheet metal and tear it. Fortunately, when this started to occur, I just stopped drilling and broke out the Dremel tool. I just ground the rest of the hole with a stone type bit. It was more work but it left a clean hole. Anyway, take it easy!

Rob KE6JDH

Date: Fri, 23 Sep 94 13:01:41 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!swiss.ans.net!
solaris.cc.vt.edu!news.duke.edu!eff!news.kei.com!ub!galileo.cc.rochester.edu!
uhura.cc.rochester.edu!rdewan@@
Subject: How to make hole for mobile antenna?
To: ham-ant@ucsd.edu

>In article <CwJCMt.BK@boi.hp.com>, riyadth@boi.hp.com (Riyadth Al-Kazily) wrote:

> What I need is a suggestion for making the hole large enough. Are
> there special drill bits available for this task, or do I need some kind
> of sheet-metal punch only available at a radio installer's shop?
>

Here are two options:

i) Greenlee 3/4" socket punch. Available from Mouser Electronics for about \$15 or so. You need to first make a 3/8" hole, place one piece under the sheet metal, one over and then use a wrench to draw the pieces together to punch a very clean 3/4" hole.
ii) A special hole designed for this purpose. It has teeth for sheet metal and a plastic covering on the saw that prevents a cut depth of more than 1/8". Saves the headliner. This is probably the best tool for this job. Single step, done from just the top of the roof and safe. The quality is not as clean as the punched hole but it is good enough. Larsen used to sell this. I suspect it is available in professional tool catalogs as 2-way radio shops have them.

Rajiv
aa9ch/2

Date: Fri, 23 Sep 1994 14:33:20 GMT
From: pacbell.com!UB.com!pippen.ub.com!news@ames.arpa
Subject: How to make hole for mobile antenna?
To: ham-ant@ucsd.edu

In article <CwJCMt.BK@boi.hp.com> riyadth@boi.hp.com (Riyadth Al-Kazily) writes:

>Hello,
>
> Having recently bought a new Nissan Pathfinder, and a Yaesu FT-5100
>to put in it, I now have the pleasant task of drilling a hole to place
>the antenna on the roof. However, my Larsen NMO-K mount says I need a
>3/4" hole, and my largest drill bit is 1/2". I have hole saws available,
>but they are toothed for wood, and I don't want to try that out on my new
>car.
>
> What I need is a suggestion for making the hole large enough. Are
>there special drill bits available for this task, or do I need some kind
>of sheet-metal punch only available at a radio installer's shop? Any
>suggestions would be helpful.
>
> -Riyadth Al-Kazily
> riyadth@boi.hp.com
>
>--
>-- Riyadhth Al-Kazily Hewlett-Packard Advanced LaserJet Operation
--
>-- riyadth@boi.hp.com (208) 396-4987 Boise, Idaho KB7YWE
DoD #295 --

The safest, neatest way to make a hole is with a sheet metal punch.
The most common ones available are made by Greenlee, I think. If you
go to an electrical supply store and ask for a "Greenlee punch" - of the
appropriate diameter, you will be given the right thing. Better yet,
borrow one from somebody who has access to a machine shop. It works like
this: you drill a small hole (say, half inch) and then slip the punch
bolt thru the hole and tighten it with a wrench until it does its
cookie-cutter thing. BUT -- this is possible only if you have access
to both sides of the metal you are cutting. I dropped the dome lite
inside my '92 Escort wagon to install the NMO mount for my Austin 500C
antenna. Piece of cake.

/***
Gary W. Thorburn gthorbur@ub.com KD1TE
***/

Date: Fri, 23 Sep 1994 04:14:34 GMT
From: ihnp4.ucsd.edu!agate!overload.lbl.gov!dog.ee.lbl.gov!news.cs.utah.edu!
cs.utexas.edu!howland.reston.ans.net!gatech!concert!hearst.acc.Virginia.EDU!
cabell.vcu.edu!jwill@network.ucsd.edu
Subject: MFJ DUAL BAND MOBILE?
To: ham-ant@ucsd.edu

I agree. I mounted it and tried to adjust the MFJ to a low SWR.... no dice. It wouldn't come down no matter what I did to the length of the whip. Sort of disappointing guess I'll have to spring for a real antenna some time in the near future.

Robert S. Williams, MD
KD4ZPH ...Yet another MFJ Dupe.

Date: Sat, 24 Sep 94 22:39:47 PDT
From: psinntp!interramp.com!usenet@uunet.uu.net
Subject: Mounting Tape for Antennas
To: ham-ant@ucsd.edu

Try toupee tape. It's double sided and sticks well even when wet. I've used it for sticking things on my boat at it always seems to hold.

article <1994Sep24.215437.6758@kuentos.guam.net>, <ldlacy@kuentos.guam.net>
writes:
> Newsgroups: rec.radio.amateur.antenna
> Path:
interramp.com!psinntp!news.intercon.com!howland.reston.ans.net!gatech!news-feed-
1.peachnet.edu!news.duke.edu!solaris.cc.vt.edu!swiss.ans.net!kuentos!ldlacy
> From: ldlacy@kuentos.guam.net (Lowell Lacy)
> Subject: Mounting Tape for Antennas
> Organization: Kuentos Communications Inc.
> Date: Sat, 24 Sep 1994 21:54:37 GMT
> Message-ID: <1994Sep24.215437.6758@kuentos.guam.net>
> X-Newsreader: TIN [version 1.2 PL2]
> Lines: 14
>
> Does anyone have a source for the foam Mounting Tape used for through the
> glass antennas? I would specifically like a source that would do mail
> order. So far it seems that companies think a person will buy a new
> antenna rather than remount? I have been able to get some from the local
> Motorola Company, but their cost causes one to look for another source.
> I tried Radio Shack recently, while on the mainland, for their scanner
> antenna, but they don't carry anything. Anyway, thanks for any help.
>
>
> --
> *****
> * Lowell D. Lacy Hafa Adai! *
> * P.O. Box 8190 Guam, Where America's Day Begins! *

> * Agat, Guam 96928-8190

Lowell.Lacy@Kuentos.Guam.Net *

Date: Sun, 25 Sep 1994 03:01:04 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!usc!nic-nac.CSU.net!charnel.ecst.csuchico.edu!csusac!csus.edu!netcom.com!
herbr@network.ucsd.edu
Subject: SGC-230 Antenna Tuner- Does it really work?
To: ham-ant@ucsd.edu

I am interested in hearing from hams that have used the SGC - 230 antenna tuner for HF operations in a home. I know that this tuner is very popular on boats, and I have heard some people claim to get great results with these things in a house as well. I understand that it will not work as well as a beam and a tower, but unfortunately I am currently stuck with putting up a low profile antenna for HF. I had been considering maybe a horizontal loop or G5RV type antenna, but there are a couple of guys there that are claiming that the SRC tuner with a random length wire is the best.

I would appreciate hearing from anyone out there that has had first hand experience with an antenna configuration like this.

Thanks and 73's

Herb - KG6OK

--
herbr@netcom.com

Date: Sat, 24 Sep 94 22:35:40 PDT
From: psinntp!interramp.com!usenet@uunet.uu.net
Subject: SGC-230 Antenna Tuner- Does it really work?
To: ham-ant@ucsd.edu

I have an SGC230 on my boat I think it's great. It tunes my insulated backstay.

I'm actually thinking of getting another for home. Right now I'm using an MFJ manual tuner and a 40 meter dipole. It works but I don't think I get out as well as I do on the boat. It's also a lot more hassle to use the manual tuner.

The SGC tunes my backstay against a ground system that consists of 30 feet of copper foil connected to two of the thru hulls on the boat. It has always worked well. I used it all the way to Hawaii last summer and was pleased with

the results.

In article <herbrCwo0Ds.IxL@netcom.com>, <herbr@netcom.com> writes:

> Newsgroups: rec.radio.amateur.antenna
> Path:
interramp.com!psinntp!news.intercon.com!howland.reston.ans.net!usc!nic-nac.CSU.n
et!channel.ecst.csuchico.edu!csusac!csus.edu!netcom.com!herbr
> From: herbr@netcom.com (Herb Rosenberg)
> Subject: SGC-230 Antenna Tuner- Does it really work?
> Message-ID: <herbrCwo0Ds.IxL@netcom.com>
> Organization: NETCOM On-line Communication Services (408 261-4700 guest)
> X-Newsreader: TIN [version 1.2 PL1]
> Date: Sun, 25 Sep 1994 03:01:04 GMT
> Lines: 20
>
> I am interested in hearing from hams that have used the SGC - 230 antenna
> tuner for HF operations in a home. I know that this tuner is very
> popular on boats, and I have heard some people claim to get great results
> with these things in a house as well. I understand that it will not work
> as well as a beam and a tower, but unfortunately I am currently stuck
> with putting up a low profile antenna for HF. I had been considering
> maybe a horizontal loop or G5RV type antenna, but there are a couple
> of guys there that are claiming that the SRC tuner with a random length
> wire is the best.
>
> I would appreciate hearing from anyone out there that has had first hand
> experience with an antenna configuration like this.
>
> Thanks and 73's
>
> Herb - KG6OK
>
>
> --
> herbr@netcom.com

Date: Thu, 22 Sep 1994 21:31:06
From: ihnp4.ucsd.edu!ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!
swiss.ans.net!gatech!swrinde!news.uh.edu!news.sccsi.com!nuchat!mike.sccsi.com!
mike@network.ucsd.edu
Subject: VERTICAL ANTENNA NEEDED
To: ham-ant@ucsd.edu

I am looking for a good vertical antenna that works 10 thru 80 meters. I

presently have an R-7 vertical which works very well, but need 80 meters. Will not have any problems with space for radials. Been looking at various antennas including the GAP, Butternut, Telex, and Cushcraft.

Any pros or cons about the verticals? Mike, K5H DU. mike@sccsi.com

Date: Thu, 22 Sep 1994 22:10:33 +0000
From: agate!howland.reston.ans.net!news.sprintlink.net!demon!arkas.demon.co.uk!
Michael@ames.arpa
Subject: Yagi Antenna for UHF TV
To: ham-ant@ucsd.edu

In article <CwHt07.Epp@Newbridge.COM>
David_Malecki@qmail.Newbridge.com "David Malecki" writes:

> Hi guys (and gals).
>
> I have had relatively good results with a yagi that I built from plans
> in the ARRL handbook ('89 I think). It was a 12 element yagi and was
> designed for somewhere in the 400 MHz area, and I just scaled
> everything for the frequency of interest (UHF channel 18 ~ 500 MHz; I
> knew the exact frequency then, forgot it now). For the driven element,
> I replaced the T-match with a folded dipole for a roughly 300 ohm
> impedance.
>
> My questions are:
>
> - does scaling work (I think it should)

It generally works in practice. When it doesn't, it's usually due to a constructional oversight: not scaling the diameter as well as the length in some extreme cases; using the same size hardware which becomes a larger portion of a wavelength at the new, higher frequency; etc.

> - would changing from aluminum tubing to solid aluminum (for the
> reflector and directors) make a big difference in desired lengths
> (or general performance)

No, it shouldn't (electrically). RF current flows on the outer regions of non-perfect conductors, so tube is fine. It results in less weight than solid cylinder. For high wind versions of the antenna, try using two or more slip-fit tubes laminated together for the full length of the element - this method of construction is quite strong.

> - how much performance (if any) would I lose by using a conducting
> boom such as aluminum (I'm currently using a wooden dowel, i.e.

> experimental version only

No, it shouldn't make much difference if you *scale* it. The boom isn't in the plane of the antenna E-field.

> - is it worth going to a larger (more elements) antenna for a little
> extra gain?

It could be worth more to stack another antenna above/below the first one. It depends on whether you can afford the additional antenna or if you'll realise more gain with the added potential difficulty of roughly doubling the no. of elements (and the boom length) to realise the same increase.

> The picture is stable, and definitely watchable, but definitely snowy
> too.

[snip]

> The transmitter is in Norwood NY (WNPI) and we're in Ottawa, Ontario
> (about 100 km / 60 > miles away).

Have you tried a masthead amplifier as well?

--

Mike Dower

G0VEY

VK2ENG

'Quoth the raven, "Never more".' ... Poe

Date: 23 Sep 1994 05:08:03 GMT

From: ihnp4.ucsd.edu!ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!
news.sprintlink.net!news.clark.net!fontam@network.ucsd.edu

To: ham-ant@ucsd.edu

References <94255.170424JBAACK31@MAINE.MAINE.EDU>, <CwCovH.uq@kd3bj.uucp>,
<tskloss-190994185442@hawmac2.tamu.edu>e

Subject : Re: Slinky antenna anyone?

I currently use a home brew slinky antenna in the attic of my townhouse
for 40

meters and have found that performance is not what I would expect from a
dipole but, better than not operating. I use a ant tuner to keep the
xmtr happy, and have been able to work what ever seems to be coming
through on the band to include my share of DX. If I didn't have
covenants, I would definately use a vertical, longwire, or dipole
instead. I have only had limited success on 80 and 30 meters with the
slinky.

73.....Marc N8CMK

Tim Skloss (tskloss@zeus.tamu.edu) wrote:

: In article <CwCovH.uq@kd3bj.uucp>, bbsuser@kd3bj.uucp (General BBS user
: login) wrote:

: > Yes. I have a slinky antenna. Haven't used it much. Set it up in the
: > attic
: > of the townhouse I used to live in, and it worked ok. took it on field
: > day
: > and properly kinked one side up nicely. the original manufacturer sold
: > out, to someone else who sold out to ... so you have to check the ads to
: > see who has one today. If you find a source, please E-mail me. I'm
: > interested in getting a replacement for half of my slinky.
: >
: > Robert.Garland@kd3bj.ampr.org
: > NX3S
: >
: >
: > --
: > Robert Garland

: I found my slinky at the local toy store, either Kay-Bee toys or Toys-R-Us.

: I use the slinkytenna on my scanner. Works well hung on the wall.

: -tim

: Tim Skloss KC5DNA LABORATORY FOR MAGNETIC RESONANCE AND MOLECULAR SCIENCE
: voice: (409) 845-4459 Texas A&M University, Dept. of Chemistry
: fax: (409) 845-7638 College Station, TX 77843-3255
: TSKLOSS@venus.tamu.edu My opinions do not reflect those of TAMU!

End of Ham-Ant Digest V94 #320
